

USAF Declass/Release Instructions On File

25X1A

IN 51913

25X1D

S E C R E T 022150Z FEB 68 CITE [REDACTED] 8815

SUBJECT: TIRE DAMAGE TO STRUCTURES

RECENTLY AN SR-71 HAD AN INFLIGHT TIRE FAILURE APPROX. ONE HOUR AFTER TAKEOFF WHICH CAUSED CONSIDERABLE DAMAGE TO THE WHEEL WELL, I.E. LOSS OF BOTH L AND R HYDRO SYSTEMS, LEAK IN "B" SYSTEM, LARGE FUEL LEAK, AND SEVERE STRUCTURAL DAMAGE TO THE UPPER WING PANEL AND FUSELAGE. FORTUNATELY, THE AIRCRAFT GOT BACK TO [REDACTED] AND LANDED WITHOUT FURTHER DAMAGE.

THE REASON FOR THIS FAILURE HAS BEEN ATTRIBUTED TO EXCESSIVE GROUND TAXI PRIOR TO TAKEOFF. THE TAXI DISTANCE, INCLUDING ONE 80-KNOT REJECTED TAKEOFF, WAS A TOTAL OF 29,000 FEET WHICH IS CONSIDERABLY IN EXCESS OF THE TIRE MANUFACTURER'S RECOMMENDATION. SINCE THIS ITEM IS NOT ADEQUATELY COVERED IN THE MANUALS, THE FOLLOWING RULES SHOULD BE OBSERVED:

1. TAXI WHICH WILL BE FOLLOWED BY AN IMMEDIATE TAKE-OFF SHOULD BE RESTRICTED TO THREE (3) MILES. ABSOLUTE MAXIMUM TOTAL TAXI DISTANCE SHALL BE FOUR (4) MILES -- 5 MINUTES COOLING AT END OF TAXI BEFORE

File
2-12

DM-4
DIO PS
OXC-2
R+D-2
COMPT
RB
DSA

2 FEB 68
25X1A
266

IN 51913

25X1A

PAGE 2 [REDACTED] 8815 S E C R E T

TAKEOFF SHOULD BE ALLOWED FOR EACH ONE-HALF MILE
OVER THREE (3) MILES -- THAT IS 5 MINUTES COOLING AFTER
3
E-1/2 MILE TAXI, 10 MINUTES COOLING AFTER 4-MILE TAXI.

2. TAXI SPEED SHOULD BE RESTRICTED TO MAXIMUM OF
60 MPH.
3. EFFECT OF RUNWAY TEMPERATURES - RUNWAY TEMPERA-
TURES UNDER 100 DEG. F WILL NOT AFFECT TIRE OPERATING
CONDITIONS. HOWEVER, FOR RUNWAY TEMPERATURES
EXCEEDING 100 DEG. F, THE FOLLOWING FACTORS SHOWN
SHOULD BE APPLIED TO THE TAXI RESTRICTIONS LISTED.

RUNWAY DEG. F	REDUCTION FACTOR
100	1.00
110	.94
120	.84
130	.61

EXAMPLE - 120 DEG. F RUNWAY TEMPERATURE

TAXI DISTANCE - .84 X 3 MILES - 2.52 MILES

THESE RESTRICTIONS WILL BE ISSUED BY T.D.C. TO MANUALS.

AN INVESTIGATION IS IN PROGRESS AT [REDACTED] WHICH WILL PROBABLY
RESULT IN BEEFING UP THE TIRE CANS. HOWEVER, KITS WILL NOT BE
AVAILABLE IN TIME FOR B.S. OPERATION.

S E C R E T